Measuring and Distance

Motion and its Types

Measuring and Distance

Distance

The length between two points is called “Distance”. The length is measured to determine the distance between two points.

Standard Units of Measurements

Measurement is actually a comparison between known and unknown quantity. Non standard units of measurements are hand span, foot span, finger width and palm length. Unknown quantity is the object to be measured and the known quantity is called as “**UNIT**”. Nowadays, world has accepted a set of units to be the Standard unit of Measurements. This set or system of Standard units is known as SI System. As per SI system, METER is the standard unit of Measurement.

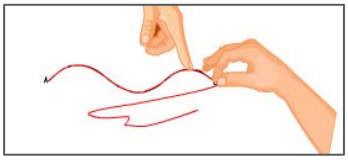
Table of metric conversion	
1 centimeter =	10 millimeter
1 decimeter =	10 centimeter
1 meter =	10 decimeter
1 dekameter =	10 meter
1 hectometer=	10 dekameter
1 kilometer =	1000 m = 10 ha

Correct measurement of length

For correctly measuring the length, the scale by which the object is to be measured should be placed along its length.
Measure the object from the zero point of the scale, if using any other full mark of the scale, then the reading of this mark must be subtracted from the reading at the other end.
The eye must be exactly in front of the point where the measurement is to be taken

Measuring a curved line

A curved line can be measured with the help of a thread which can then be measured on meter scale.



Motion and its Types

Motion

The object which is stationary and not changing its position is said to be on Rest. The object which changes its position from one place to another is said to be in motion.

Types of Motion

The different types of motion around you can be categorized as follows:

Linear motion: If an object moves from one position to another along a straight line in one direction is called linear motion. The freely falling football is also following linear motion.

Circular motion: when a body moves on its own axis or around a fixed centre, then the body is said to be in circular motion. Both Rotation and Revolution are examples of circular motions.

Activity

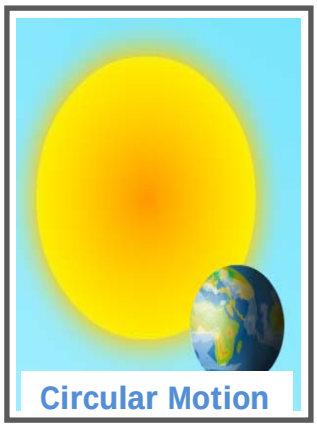
Observe the motion of the giant wheel. We see that it moves along a circular path. In this motion, the distance of stokes from the centre point remains the same. This type of motion is called circular motion.

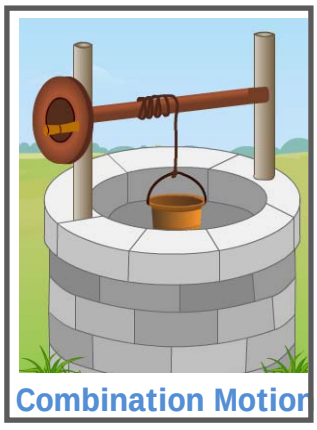

Giant wheel

Combination motion: Motion having more than one type of motion is called combination motion. In a well, the pulley on which the rope runs has a circular motion and the bucket has a linear motion.

Periodic Motion: The motion where an object repeats its motion after a fixed time interval is called periodic motion. Child Swinging on swing – Periodic Motion.


Linear Motion


Circular Motion


Combination Motion


Periodic Motion